

- 1           1.     A method comprising:  
2                 providing error data to indicate motion in an image;  
3                 determining a characteristic of the error data; and  
4                 based on said characteristic, determining whether to use said error data to  
5     indicate motion in an image.
- 1           2.     The method of claim 1 including representing error data as a collection of  
2     ordered bits, and coding the bits of each order to indicate zerotree roots that are  
3     associated with the order.
- 1           3.     The method of claim 1 wherein providing error data includes taking the  
2     difference between two successive image representations in an image sequence.
- 1           4.     The method of claim 3 wherein taking the difference includes taking the  
2     difference of two successive discrete wavelet transform coded frames.
- 1           5.     The method of claim 1 wherein determining a characteristic includes  
2     determining whether or not the error data exceed a predetermined threshold value.
- 1           6.     The method of claim 5 including, if the magnitude of the error data is  
2     below the value, using a motion vector to indicate motion in the image.
- 1           7.     The method of claim 5 wherein if the magnitude of the error data exceeds  
2     the value, using a motion vector and the error data to indicate motion in an image.
- 1           8.     The method of claim 5 including zerotree encoding said error data.

1           9.     The method of claim 8 including zerotree encoding a representation of the  
2 intensity values of pixels making up an image.

1           10.    An article comprising a storage medium readable by a processor-based  
2 system, the storage medium storing instructions to enable a processor to:  
3                provide error data to indicate motion in an image;  
4                determine a characteristic of the error data; and  
5                based on said characteristic, determine whether to use said error data to  
6 indicate motion in an image.

1           11.    The article of claim 10, the storage medium comprising instructions to  
2 enable the processor to:  
3                represent error data as a collection of ordered bits and code the bits of each  
4 order to indicate zerotree roots that are associated with the order.

1           12.    The article of claim 10, the storage medium comprising instructions to  
2 enable the processor to take the difference between two successive image representations  
3 in an image sequence to develop the error data.

1           13.    The article of claim 12, the storage medium comprising instructions to  
2 enable the processor to take the difference of two successive discrete wavelet transform  
3 coded frames.

1           14.    The article of claim 10, the storage medium comprising instructions to  
2 enable the processor to determine whether or not the error data exceed a predetermined  
3 threshold value.

1           15.    The article of claim 14, the storage medium comprising instructions to  
2   enable the processor to, if the magnitude of the error data is below the value, use a  
3   motion vector to indicate motion in the image.

1           16.    The article of claim 14, the storage medium comprising instructions to  
2   enable the processor to, if the magnitude of the error data exceeds the value, use a motion  
3   vector and the error data to indicate motion in the image.

1           17.    The article of claim 14, the storage medium comprising instructions to  
2   enable the processor to zerotree encode said error data.

1           18.    The article of claim 17, the storage medium comprising instructions to  
2   enable the processor to zerotree encode a representation of the intensity values of pixels  
3   making up an image.

1           19.    A system comprising:  
2                   a subtracter to provide error data to indicate motion in an image; and  
3                   a device to determine a characteristic of the error data and, based on the  
4   characteristic, determine whether to use the error data to indicate motion in an image.

1           20.    The system of claim 19 wherein said device represents error data as a  
2   collection of ordered bits, and codes the bits of each order to indicate zerotree roots that  
3   are associated with the order.

1           21.    The system of claim 19 wherein the subtracter takes the difference  
2   between two successive image representations in an image sequence to develop error  
3   data.

1           22.    The system of claim 21, wherein the subtracter takes the difference of two  
2   successive discrete wavelet transform coded frames.

1           23.    The system of claim 19 wherein the device determines whether or not the  
2   error data exceeds a predetermined threshold value.

1           24.    The system of claim 23 wherein the device uses a motion vector only to  
2   indicate motion in the image if the magnitude of the error is below the value.

1           25.    The system of claim 23 wherein the device uses a motion vector and error  
2   data to indicate motion in the image if the magnitude of the error exceeds the value.

1           26.    The system of claim 23 wherein said device zerotree encodes said error  
2   data.

1           27.    The system of claim 26 wherein the device zerotree encodes a  
2   representation of intensity values of pixels making up an image.

1           28.    The system of claim 19 including arithmetic coder to code said error data.

1           29.    The system of claim 19 wherein said device zerotree encodes said error  
2   data and inverts the zerotree encoding of said error data.

